epiTRENDS

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Notifiable Conditions Update
Unexplained Illness or Death from Potential Infection

Surveillance for unexplained critical illness or death is a key public health strategy for detecting emerging pathogens and possible incidents of bioterrorism. With the recent revision of the Notifiable Conditions surveillance system in Washington State, many conditions have been removed from the list of notifiable conditions and a few new ones have been added.

"Unexplained critical illness or death" has joined that list. For this surveillance system to be successful it is important that clinicians report unusual disease occurrences or deaths to the local health departments even before completing a laboratory investigation or establishing a diagnosis.

An unexplained critical illness or death is defined by the following criteria:

1. Critical illness or death in a person 1 to 49 years of age, and
2. Previously healthy with no preexisting chronic medical condition[1] likely to explain the illness or death, and
3. Hallmarks of infectious disease[2], and
4. Preliminary testing has not revealed a cause for illness or death.

One purpose of such surveillance is to promptly identify emerging new pathogens. Much of the impetus for this approach comes from the 1993 experience with hantavirus pulmonary syndrome in New

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Statewide Perinatal Survey Provides Data on Access to Care, Contraceptive Use, Breastfeeding Patterns, and Other Issues

Thirty-seven percent of the live births in Washington State from April 1996 through December 1998 resulted from pregnancies that were unintended at the time of conception. Of the mothers who had unintended pregnancy, 58% did not use birth control at the time of conception. These findings emerged in Volume I of the four volumes of the 1996–1998 Washington State Pregnancy Risk Assessment Monitoring System (PRAMS) Surveillance Report. Other key findings from Volume I include:

- Eighty-four percent of women began prenatal care during the first trimester. Barriers to prenatal care reported by these women included not being able to get an earlier appointment (29%), not knowing they were pregnant (26%), and not having enough money to pay for visits (24%).
- Eighty-six percent of women reported initiating breastfeeding before they left the hospital. Seventy-nine percent of non-Medicaid women and 65% of Medicaid women reported they were still breast-feeding at one month postpartum. These percentages decreased to 70% and 52%, respectively, at two months postpartum. Washington State still has one of the highest early postpartum breastfeeding rates in the nation. Much health education is still needed to achieve the Healthy People goal that 75% of women breastfeed during this period (Table 1, page 2). Eighty-seven percent of women surveyed reported that a prenatal care provider discussed breastfeeding with them during their prenatal period.

In addition to these topics, Volume I provides data regarding access to prenatal care, awareness of benefits of taking folic acid supplements in reducing

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Perinatal Survey *(from page 1)*

birth defects, and hospital stays for labor and delivery.

PRAMS is an ongoing population-based surveillance system sponsored by the Centers for Disease Control and Prevention. These survey data supplement vital records data and generate state-specific information for planning and assessing perinatal health programs. Twenty-four states plus New York City have been collecting PRAMS data; six new states joined the system in April. In Washington, the Office of Maternal Child Health (OMCH) in the State Department of Health (DOH) began PRAMS data collection efforts in June 1993.

Washington State PRAMS mails a questionnaire statewide to women who are two to six months postpartum and follows up by telephone for nonresponders. Approximately 2,000 survey participants annually are drawn from the birth certificate data of live births through a stratified random sampling based on race and ethnicity. Subjects are sampled from the following groups: White non-Hispanic, African American non-Hispanic, Asian/Pacific Islander non-Hispanic, Native American non-Hispanic, and Hispanic. Oversampling ensures that sufficient numbers of participants from minority groups are included in the survey.

Mailed surveys and telephone interviews for nonresponders are available in English and Spanish. The statistically weighted survey is considered representative of birth mothers in the general population and overall response rates for survey participants have averaged 70% since 1994. For the survey period April 1996 through December 1998, 6,034 mothers responded.

Washington State's current questionnaire consists of 73 items related to risk and protective factors during pregnancy and infancy and factors contributing to better access to prenatal and pediatric health care. Topics include: unintended pregnancy, access to and content of prenatal care, patterns of smoking and alcohol drinking, Medicaid and WIC participation, breastfeeding initiation and duration, infant health and care, physical abuse, folic acid awareness, HIV counseling and testing, infant sleep position, postpartum depression, stress, and children's safety issues.

PRAMS surveillance data are used at the national, state, and local level. OMCH has used and shared PRAMS data to guide interagency state programs and develop policy. Some current initiatives include:

- trainings for medical providers focused on screening all pregnant women for alcohol and drug use;
- a collaborative, multi-agency pilot project for tobacco cessation during pregnancy and reducing environmental smoke exposure of infants;
- development of a First Steps performance measure to monitor trends in educating women about pregnancy planning and birth control methods;
- genetic screening education programs for medical providers;
- evaluation of domestic violence (DV) rates experienced by pregnant women and rates of screening for DV.

For More Information:

More information regarding PRAMS is available on the Centers for Disease Control and Prevention Web site: http://www.cdc.gov/nccdphp/drh/srv_prams.htm; and the Department of Health Web site, http://www.doh.wa.gov/cfh/prams/default.htm, or by calling the Washington State PRAMS office at 360-236-3576 or sending an email message to WAPRAMS@doh.wa.gov.

Figure 1: Factors associated with breastfeeding

Breastfeeding Duration	% Women
Two months	63
One month	73
Initiated	87

	Percent Breastfeeding
Maternal Age (years)	
<20	41
20–24	54
25–34	69
35+	79
Race/Ethnicity	
White/other	64
African American	54
Native American	54
Asia/Pacific Islander	62
Hispanic	61
Education (years)	
<12	48
12	53
>12	74
Medicaid Status	
Grant recipients	43
Medicaid only	53
Medicaid expansion	61
Non-Medicaid	70

High Lead Levels Found in Some Candies from Mexico

The Department of Health has issued a warning about high levels of lead found in candy products made in Mexico by Dulmex. The source of lead appears to be the orange ink used on the candy wrappers for products such as coconut rolls, tamarind rolls, and tamarind lollipops. The rolls are commonly packaged under the names *Casa de Dulce*, *Juanita's Payaso*, or *Mojave*, and the lollipops under the name *Bolirindo*. These candies are widely sold in Washington State, particularly in the Yakima Valley.

An FDA alert is available in English at: http://www.fda.gov/bbs/topics/ANSWERS/2001/ANS01079.html, and in Spanish at: http://www.fda.gov/bbs/topics/ANSWERS/spanish/span01079.html.

For information on the DOH action, contact marcia.mueller@doh.wa.gov.

Monthly Surveillance Data by County

April 2001* – Washington State Department of Health

County	E. coli O157:H7	Salmonella	Shigella	Hepatitis A	Hepatitis B	Non-A, Non-B Hepatitis	Meningococcal Disease	Pertussis	Tuberculosis	Chlamydia	Gonorrhea	AIDS	Pesticides†	Lead§#
Adams	0	0	0	0	0	0	0	0	0	3	0	0	0	1/56
Asotin	0	0	0	0	0	0	0	0	0	3	0	0	0	0/0
Benton	0	0	0	0	0	0	0	0	0	26	1	1	3	0/#
Chelan	0	0	0	0	0	0	0	0	0	2	1	0	0	0/22
Clallam	0	0	0	0	0	0	0	0	0	11	1	0	0	0/0
Clark	0	3	1	2	1	0	6	0	0	50	8	1	0	0/17
Columbia	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Cowlitz	0	0	0	0	0	0	0	0	0	9	0	1	0	0/42
Douglas	0	0	0	0	0	0	0	0	0	1	0	0	2	0/0
Ferry	0	0	0	0	0	0	0	0	0	1	0	0	0	0/0
Franklin	0	0	1	0	0	0	0	0	0	14	0	0	0	0/14
Garfield	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Grant	0	1	0	0	0	0	1	0	2	10	0	0	0	0/65
Grays Harbor	0	0	0	0	0	0	0	0	0	6	0	0	1	0/0
Island	0	1	0	0	0	0	0	0	0	14	1	0	1	0/#
Jefferson	0	0	0	0	0	0	0	0	0	1	0	0	0	0/0
King	1	13	6	1	3	0	1	0	17	347	112	19	0	2/49
Kitsap	0	0	1	1	0	0	0	1	1	44	12	2	0	0/6
Kittitas	0	0	0	0	0	0	0	0	0	9	0	0	0	0/9
Klickitat	0	0	0	0	1	0	0	0	0	3	0	0	0	0/0
Lewis	0	2	0	0	0	0	0	1	0	6	0	0	0	0/#
Lincoln	0	0	0	0	0	0	0	0	0	0	0	0	0	0/#
Mason	0	0	0	0	0	0	0	0	1	10	3	0	0	0/0
Okanogan	0	0	0	0	0	0	0	0	0	7	0	0	0	0/0
Pacific	0	1	0	0	0	0	0	0	0	1	0	0	0	0/#
Pend Oreille	0	0	0	0	0	0	1	0	0	0	0	0	0	0/0
Pierce	0	1	2	0	0	0	0	1	0	177	48	2	0	2/38
San Juan	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Skagit	0	1	0	0	2	0	1	0	0	17	0	1	1	0/5
Skamania	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Snohomish	0	3	0	0	1	0	1	0	0	115	27	1	1	1/15
Spokane	1	1	0	0	2	0	0	0	2	47	10	4	0	1/25
Stevens	0	0	0	0	0	0	0	0	0	4	0	0	0	0/0
Thurston	0	1	0	0	0	0	0	0	1	19	1	0	1	0/5
Wahkiakum	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Walla Walla	0	1	0	0	0	0	0	0	0	9	0	0	0	1/32
Whatcom	0	1	0	1	1	0	0	0	0	11	3	0	0	0/6
Whitman	0	0	0	0	0	0	0	0	0	5	0	0	0	0/0
Yakima	0	0	1	0	0	0	0	0	2	60	6	0	4	1/7
Unknown														0/0
Current Month	2	30	12	5	11	0	11	3	26	1042	234	32	14	9/423
April 2000	4	30	38	36	6	2	2	35	24	1071	177	52	27	13/397
2001 to date	11	106	56	24	31	9	34	29	63	4484	1003	185	26	44/1458
2000 to date	12	98	208	93	17	8	15	89	75	4261	763	185	60	34/1291

* Data are provisional based on reports received as of April 30, unless otherwise noted.
† Unconfirmed reports of illness associated with pesticide exposure.
§# Number of elevated tests (data include unconfirmed reports) / total tests performed (not number of children tested); number of tests per county indicates county of health care provider, not county of residence for children tested; # means fewer than 5 tests performed, number omitted for confidentiality reasons.

Notifiable Conditions *(from page 1)*

WWW Access Tips

For more information on notifiable conditions, see the Web site of the Department of Health at: http://www.doh.wa.gov/os/policy/

Mexico. Two patients with unusual symptoms went to the same physician, who contacted colleagues in the area. An investigation led to recognition of a new pathogen and identification of the reservoir within six weeks of the first case presentation.

Unexplained critical illness or death surveillance is also a key to the public health system's efforts to detect possible incidents of bioterrorism. Many of the agents of highest concern for potential use as a biological weapon have nonspecific presenting symptoms, and most laboratories lack the ability to test for these organisms. Clusters of unusual illness also could be associated with a bioterrorism event. If bioterrorism is suspected, the Washington State Department of Health (DOH) will arrange for specialized laboratory testing. Guidance on treatment, prophylaxis, infection control, and assistance in field investigations are available through both your local health department and DOH.

An unexplained critical illness or death should be immediately reported to the local health jurisdiction in which the affected person resides. If no one is available at the local health department, please call DOH at 877-539-4344.

Staff will work with the health care provider to define the primary syndrome and review the diagnostic possibilities. In other states conducting this surveillance the most common clinical syndromes reported involve central nervous system (meningitis, encephalitis), respiratory or cardiac systems, sepsis/multi-organ failure, and hepatic insufficency/failure. Washington expects approximately 120 cases per year to be reported using the case definition.

[1] This includes: malignancy; HIV infection; chronic cardiac disease; pulmonary, renal, hepatic, or rheumatologic disease; diabetes mellitus; immunosuppression resulting from preexisting disease or therapy, evidence of toxic ingestion or exposure, or nosocomial infection.

[2] This includes at least one of the following: fever or history of fever, abnormal white blood cell (WBC) count or differential consistent with infection (including increase in band forms, leukocytosis, leukopenia, and presence of reactive morphologic changes in neutrophils, such as toxic granules, Dohle bodies, and cytoplasmic vacuoles), histopathologic evidence of an acute infectious process, or a physician-diagnosed syndrome consistent with an infectious disease including but not limited to febrile illness with rash, encephalitis/meningitis, fulminant hepatitis/hepatic dysfunction, myocarditis, unexplained sepsis syndrome, or ARDS/respiratory failure.

Calendar

APIC 2001 — Annual conference of the Association for Professionals in Infection Control and Epidemiology

June 8–13, Seattle

Preconference workshops include a bioterrorism tabletop drill, outbreak investigation, and infection control topics. For a full program schedule and to register, visit the APIC Web site, http://www.apic.org

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